

CLAIMS:

1. A method in video coding for determining a motion vector prediction associated with a target block of pixels representing a certain area of a video picture, comprising the steps of:

calculating respective vector differences between a primary set of motion vectors associated with a first number of blocks adjacent to the target block and one or more of a secondary set of motion vectors respectively associated with a second number of blocks also adjacent to the target block; and

selecting a motion vector among said primary set of motion vectors corresponding to a smallest one of said vector differences or to a smallest sum of vector differences associated with the respective motion vectors of said primary set as the motion vector prediction.

2. The method according to claim 1, wherein the first number of blocks is localized close to a leftmost upper corner of the target block, and the second number of blocks is localized close to a rightmost upper corner of the target block.

3. The method according to claim 1, wherein the first number of blocks includes a first and a second block, and the second number of blocks includes a third block.

4. The method according to claim 3, wherein the motion vectors of said first, second and third blocks is  $(x_1, y_1)$ ,  $(x_2, y_2)$ , and  $(x_3, y_3)$ , respectively.

5. The method according to claim 4, wherein the step of calculating respective vector differences between the motion vectors of said first and third blocks and between said second and third blocks includes calculating the following equations:

$$\sqrt{(x_3 - x_1)^2 + (y_3 - y_1)^2} \quad \sqrt{(x_3 - x_2)^2 + (y_3 - y_2)^2} .$$

6. The method according to claim 4, wherein the step of calculating respective vector differences between the motion vectors of said first and third blocks and between said second and third blocks includes calculating the following equations:

$$|x_3 - x_1| + |y_3 - y_1| \quad |x_3 - x_2| + |y_3 - y_2|.$$

7. The method according to claim 1, wherein some blocks of said first number of blocks is included in said second number of blocks.

8. The method according to claim 2, wherein the first number of blocks includes a first and a second block, and the second number of blocks includes a third block.

9. The method according to claim 8, wherein the motion vectors of said first, second and third blocks is  $(x_1, y_1)$ ,  $(x_2, y_2)$ , and  $(x_3, y_3)$ , respectively.

10. The method according to claim 2, wherein some blocks of said first number of blocks is included in said second number of blocks.

11. A computer program product for determining a motion vector prediction associated with a target block of pixels representing a certain area of a video picture, comprising:

a first computer code configured to calculate respective vector differences between a primary set of motion vectors associated with a first number of blocks adjacent to the target block and one or more of a secondary set of motion vectors respectively associated with a second number of blocks also adjacent to the target block; and

a second computer code configured to select a motion vector among said primary set of motion vectors corresponding to a smallest one of said vector differences or to a smallest

sum of vector differences associated with the respective motion vectors of said primary set as the motion vector prediction.

12. The computer program product according to claim 11, wherein the first number of blocks is localized close to a leftmost upper corner of the target block, and the second number of blocks is localized close to a rightmost upper corner of the target block.

13. The computer program product according to claim 11, wherein the first number of blocks includes a first and a second block, and the second number of blocks includes a third block.

14. The computer program product according to claim 13, wherein the motion vectors of said first, second and third blocks is  $(x_1, y_1)$ ,  $(x_2, y_2)$ , and  $(x_3, y_3)$ , respectively.

15. The computer program product according to claim 14, wherein the step of calculating respective vector differences between the motion vectors of said first and third blocks and between said second and third blocks includes calculating the following equations:

$$\sqrt{(x_3 - x_1)^2 + (y_3 - y_1)^2} \quad \sqrt{(x_3 - x_2)^2 + (y_3 - y_2)^2} .$$

16. The computer program product according to claim 14, wherein the step of calculating respective vector differences between the motion vectors of said first and third blocks and between said second and third blocks includes calculating the following equations:

$$|x_3 - x_1| + |y_3 - y_1| \quad |x_3 - x_2| + |y_3 - y_2| .$$

17. The computer program product according to claim 11, wherein some blocks of said first number of blocks is included in said second number of blocks.

18. The computer program product according to claim 12, wherein the first number of blocks includes a first and a second block, and the second number of blocks includes a third block.

19. The computer program product according to claim 18, wherein the motion vectors of said first, second and third blocks is  $(x_1, y_1)$ ,  $(x_2, y_2)$ , and  $(x_3, y_3)$  , respectively.

20. The computer program product according to claim 12, wherein some blocks of said first number of blocks is included in said second number of blocks.